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10/583,328	12/05/2006	Wojciech A. Wilczak	S9025.0139	3090

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EXAMINER	
PADGETT, MARIANNE L	
ART UNIT	**PAPER NUMBER**
1715	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/583,328	**Applicant(s)** WILCZAK, WOJCIECH A.	
	Examiner MARIANNE L. PADGETT	**Art Unit** 1715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _19 March 2010_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

1. Applicant's amendment of 3/19/2010 has corrected 112 issues as set forth in section 1 of the action mailed 12/21/2009. It is also noted that while the amendment to claim 1 has provided a distinction between independent claim 1 and dependent claim 9, this distinction is nominal, as claim 9 is only claiming an action which implicitly has already been performed in the independent claim, hence that's occurrence is inherent in the requirements of independent claim 1, i.e. one cannot have a plasma polymerized coating, unless it was formed.

Applicant's attention is additionally directed to claim 1, line 5, which states "at least one component **with** forms..." (emphasis added). Would applicant perhaps intend --at least one component **which** forms... --?

2. The following is a quotation of the appropriate paragraphs of **35 U.S.C. 102** that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 **U.S.C. 103(a)** which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 5-7, 9-12 & 16-17** are rejected under 35 U.S.C. **102(b)** as being anticipated by **DAIMON et al.** (4,891,264).

Claims 2-4 & 13-15 are rejected under 35 U.S.C. **103(a)** as being unpatentable over **Daimon et al.** (264).

Applicant has argued that **Daimon et al.** 's teaching of plasma polymerization cannot teach or suggest formation of a reaction product with unpolymerized polymerizable functional groups, as they do not specifically discuss such residual groups. However, these arguments fail to take into account the taught reason for performing the taught plasma polymerization treatment is to enhance the adhesion, specifically to cause surface wetting tension of the surface treated to be adjusted to 35 dyn/cm or more (col. 3, lines 38-44+; col. 6, line 50-col. 7, lines 9), especially since enhancing the adhesion of a coating that is being crosslinked and cured onto a polymeric surface as taught, implies linking to that surface. Therefore, plasma polymerization processes that produce these taught surface tensions could not be lacking in the generically claimed residual polymerizable groups as effectively asserted by applicant. Note, one of ordinary skill & competence in the plasma polymerization & adhesion arts would understand these basic concepts apply to the teaching of Daimon et al. Furthermore, as applicant's claims read on even minimal presence of unpolymerized functional groups (i.e. as few as 2), it would be virtually impossible for any plasma polymerization, even if deposition didn't provide the taught surface wetting tension, to not contain that number of polymerizable functional groups. The claimed "residual unpolymerized polymerizable functional groups" is inclusive of any functional group present after the plasma polymerization deposition, which is capable of undergoing polymerization (i.e. inclusive of cross-linking & the like) with any polymeric entity. Note that the corona discharge also mentioned by applicant 's arguments as taught by Daimon et al., would even supply polymerizable functional groups, as a corona discharge treatment applied to synthetic resin fiber substrates as contemplated in Daimon et al. to produce taught surface tensions would instead create a functional groups on the substrate surface, a different process from the plasma polymerization, but as taught having analogously effective results. Therefore, Daimon et al.'s teaching of plasma polymerization to provide enhanced surface adhesion of taught surface

tensions would inherently have such unpolymerized polymerizable functional groups as generically claimed, thus applicant's arguments are not convincing. Daimon et al.'s process may not (or may) provide the type or quantity or the like as *desired* by applicant, however applicant's claims are completely generic with this respect, such that even a minimal amount as may be considered inherent in Daimon et al.'s teachings, may be considered to read the claims as presently written. It is not necessary for a reference to describe a process in terms of the same mechanistic description provided by applicants, for the reference to be covering the same concepts.

As previously set forth, **Daimon et al.** teach surface treating a composite substrate (e.g. synthetic resin fibers) in order to enhance the adhesion of the "curing composition" that is applied thereto, where the means of treatment includes plasma polymerization treatment. The composition applied to the treated surface may be cross-linked and cured by one of a variety of radiation means, where curing options are inclusive of UV & electron beam, and where the compositions may be composed of various curable resins inclusive of epoxy resins and acrylate resins, as well as various reactive diluents, such as various glycol diacrylates, etc., various pigments or dyes, and various other modifiers. Means of applying the curable composition are taught to include "coaters of various print types such as screen, offset, gravure, letter press, flexographic printing, etc."

While Daimon et al. do not disclose that their curing compositions may be ink, the teachings of using pigments and dyes in the compositions, and of deposition via various claimed printing techniques, would have been suggestive to one of ordinary skill in the art that the compositions taught by this reference are suggestive of or encompass inks, particularly the specifically claimed radiation curable gravure or radiation curable flexographic ink, as Daimon et al. teach applying their curable compositions via gravure or flexographic printing techniques. This either implies that inks were used, since printing is occurring, or would have made it obvious to one of ordinary skill in the art to use an ink comprising taught compositions, since one is printing, especially considering that no actual composition for specific

printing techniques are claimed, only intended uses. With respect to lithographic printing, it is another standard printing technique, and the disclosure is explicitly not limited to the specific printing techniques listed, hence it would've been further obvious to one of ordinary skill in the art that virtually any conventional printing technique is contemplated to be useful, thus making lithographic techniques another obvious option. Note with respect to product claims 13-15, where the inks employed are described by the technique by which they were meant to be applied, that this requires no specific composition or structure that can be determined by the examiner, and can be considered to read on any radiation curable ink composition in the claimed product. In Daimon et al., particularly see abstract; col. 2, lines 5-26 & 36-54; col. 4, lines 44-col. 5, lines 35 & 51-55; col. 6, lines 50- 68, esp. 60-62; col. 7, lines 10-24 & 36-52; col. 8, line 59-col. 9, line 8.

4. **Claims 1, 5-7, 9, 11-12 & 16-17** are rejected under 35 U.S.C. **102(b)** as being anticipated by **VARGO et al.**(6,428,887 B1).

Claims 2-4, 10 & 13-15 are rejected under 35 U.S.C. **103(a)** as being unpatentable over **Vargo et al.**

Applicant argues that the polymerized fluorocarbon deposits on nonhalogen substrates only have H or O substituted for F, **however** while **Vargo et al.** may perform such a sequence, their teachings are not so limited. Specifically, the plasma treatment of the nonhalogen substrates, including plasma polymerized depositions of fluorocarbons, is specifically discussed as providing oxygen or **oxygen containing groups** on the surface to produce the modified oxyhalo polymer-containing substrate (col. 3, lines 30-40), where the plasma gas/vapor mixtures employed to create these structures include methanol & formaldehyde (i.e. polymeric monomers) that are being plasma attached to the polymer surface (col. 5, lines 56-64; Ex. 1, esp. col. 13, lines 10- 50), so may be considered plasma polymerized as organic monomers are attaching to thus polymerizing with polymeric structures, especially considering incorporation-by-reference of **Gardella, Jr. et al.** ((4,946,903): abstract; col. 3, lines 30-col. 4, lines 49,

esp. 30-38), which discusses the explicitly taught plasma process with the taught methanol & formaldehyde monomers creating low molecular weight containing functional entities including alkoxy functionality is inclusive of not just methoxy, but also ethoxy, or epoxy or R'-CO-, where R' = H or alkyl, particularly C_1-C_5 lower alkyls, including methyl, ethyl, propyl, isopropyl, etc., where the examiner notes that such oxygen containing functionalities could not have been formed from methanol & formaldehyde precursors without plasma polymerization occurring. An analogous teachings are found in the other incorporation-by-reference of **Gardella, Jr. et al.** ((5,627,079): abstract; col. 4, lines 18-30 & 50-col. 5, lines 21; col. 6, lines 25-col. 7, lines 35; col. 9, lines 20-60, etc.). This may not (or may) be it the type of plasma polymerization reactions to applicants intend to employ in their own processes, however such plasma polymerization reactions are covered by applicant's broad claim terminology. Thus, applicant's arguments with respect to Vargo et al.'s plasma polymerization processes not providing residual, i.e. remaining functional groups, are not convincing.

With respect to applicant's arguments that the adhesive is our only UV cured when they are employed to attached to something else, this is not convincing as in listing how the various polymeric adhesives may be attached to the reactive sites on the oxy halogenated polymer surfaces Vargo et al. specifically disclose on col. 9, lines 59-67, specifically 65, that the "above named adhesives... **method of application** of the adhesive is dependent on the particular enduses and the adhesive. For example, adhesives can be brushed, sprayed,...**UV coated**...", which clearly is applying via use of radiation, and while the teaching of col. 9, lines 49-52 state "Both thermoplastic and thermosetting adhesives are cured (set, polymerized, solidified) by heat, catalysts, chemical reaction, free radical activity, radiation, a loss of the solvent, etc., as governed by the particular adhesives chemical nature..." could ambiguously mean curing after bonding as asserted by applicant, it does not necessarily mean so, nor does it obviate the subsequent teaching of UV coated. Therefore, applicant's arguments are further unconvincing. While

Vargo et al. may not be performing a process as actually contemplated by applicant, *as presently written* applicant's claims do not distinguish over the processes of Vargo et al.

Vargo et al. disclose adhesive-oxyhalopolymer composites, where an oxyhalopolymer layer with functionality groups that provide sites to which to bond the adhesive material, may be deposited via a plasma polymerization process onto the substrate. The adhesive is to be applied may include polyacrylates or epoxides, may be cured by radiation such as UV, may be prepared such that they are transparent, colored or opaque, and it is mentioned that they may be applied by gravure coating techniques. Vargo et al. does not mention that their compositions may be inks, nor particularly suggest flexographic or lithographic techniques, but the reference provides for individual components required by ink compositions, where it is noted that being an adhesive does not prohibit a composition from also been described as a member of the class of inks, hence analogous to above discussion, it would have been obvious to one of ordinary skill in the art to employ taught colored compositions that are of the consistency that may be called an ink, especially as gravure coating, i.e. a printing technique, may be employed, thus is suggestive of ink. It is further noted that the deposition techniques taught by Vargo et al. are inclusive of "... nip rolled, reverse rolled, gravure coated, UV coated or by any practical method", hence the application of other conventional printing techniques such as the claimed flexographic or lithographic techniques would have been obvious to one of ordinary skill in the art, as they would have been expected to be effective given the taught broad applicability to generic printing & to a variety of specific printing techniques. In Vargo et al., particularly see the abstract; col. 1, lines 11-16; col. 6, lines 34-45+; col. 7, lines 6-13 & 31-56; col. 9, line 35-col. 10, line 38, esp. 24-38; col. 12, lines 8-25 & 55-63; Ex. 1, esp. col. 13, lines 53-62 & table 1.

5. **Claims 2-4 & 13-15** are rejected under 35 U.S.C. **103(a)** as being unpatentable over **Daimon et al** (264), in view of **McGee** (2003/0207121 A1).

The secondary reference to **McGee** explicitly shows UV curable inks that may be deposited by any known routine process, that is taught to be inclusive of gravure <u>or</u> flexographic <u>or</u> lithographic methods, and is inclusive of the teaching to promote adhesion of the curable inks through deposition of polymers with ethnically unsaturated moieties, thus is cumulative to and supportive of the above arguments concerning the obviousness of the radiation curable compositions being inks and the techniques by which it would have been obvious to apply them. In MCGEE, particularly see abstract; [0092]; Ex. 1, [0094]; Ex. 2, [0101].

6. **Claims 8 & 18-20** are rejected under 35 U.S.C. **103(a)** as being unpatentable over **Daimon et al** (264), optionally considering **McGee**, as applied to claims 1-7 & 9-17 above, and further in view of **Goodwin et al** (WO 02/28548 A2) <u>or</u> **Willis et al**. (WO 00/78469 A2) <u>or</u> **Kamel et al**. (5,080,924).

Daimon et al., while teaching the use of plasma polymerization to promote adhesion of a layer inclusive of radiation curable deposits that are cross-linking and cured thereon, does not teach any specific materials for the plasma polymerization adhesion layer. However, all the secondary references to Goodwin et al <u>or</u> Willis et al. <u>or</u> Kamel et al, teach the deposition of plasma polymerized coatings that promote adhesion of subsequent layers or deposits, where the plasma deposited layer has reactive or functional groups on its surface to provide such effects.

Specifically, **Willis et al**. suggest plasma polymerization of material such as glycidyl methacrylate, which retains reactive epoxy groups after the plasma polymerization deposition, for use in the adhesion processes. In WILLIS et al., particularly see abstract; page 1, lines 1-8; page 3, lines 4-22; page 6, lines 22-page 7, lines 25; page 8, lines 17-34; page 9, line 22-page 10, line 15 & 33-35; Ex. 1, pages11-13, esp. page 11, lines 5-17.

Goodwin et al. describes a plasma process, which may deposit organic materials inclusive of glycidyl methacrylate or halogenated alkenes on a wide variety of substrates, inclusive of plastics or

metals or woven or nonwoven materials, etc., where the plasma polymer may be employed as an adhesion promoter. In GOODWIN et al., particularly see abstract; page 2, [0004-7]; page 3, [0009]; page 4, [0011], esp. lines 8-20 & 22-25; page 6, [0014], esp. lines 30-32; page 8, esp. lines 1-3, 18-20 & 25-27.

Similarly, **Kamel et al.** plasma activates or cleans the surface, then plasma deposits and polymerizes materials inclusive of polyacrylic acid or the like, which provide pendant terminal carboxylic acid groups that are available to react, particular via cross-linking to desired organic materials. In KAMEL et al., particularly see abstract; col. 6, lines 3-68; col. 7, lines 1-13 & 50-col. 8, lines 5 & 33-col. 9, line 15.

Given the teachings in any one of these secondary references, it would have been obvious to one of ordinary skill of the art that one employs the taught plasma polymerization to provide adhesion promotion for the radiation curable coating to be crosslink and cured thereon, to employ material suggested by these secondary references in the taught plasma polymerization process to enable the taught adhesion in cross-linking effects, as the secondary references are seen to provide cross-linking means via their taught functional groups that remain on the surface after the taught plasma polymerization of materials such as the various epoxy and/or acrylate compounds, hence are consistent with requirements of the primary reference.

7. **Claims 8 & 18-20** are rejected under 35 U.S.C. **103(a)** as being unpatentable over **Vargo et al.**, as apply to claims 1-7 & 9-17 above, and further in view of **Goodwin et al.** (discussed above).

While **Vargo et al.** suggests plasma polymerization to form oxyhalopolymers with oxygen-functional groups available for bonding and adhesion of adhesives, and note that a broader range of thermosetting materials or thermoplastic materials may be employed, which may include epoxy type resins or methacrylic acid, etc., Vargo et al. do not teach the use of plasma polymerized epoxies or acrylates to provide the functionalized adhesion promoting layer, however **Goodwin et al.** shows that epoxyacrylate compounds and halogenated compounds can be equivalently employed when deposited by

plasma polymerization for adhesion purposes, hence it would've been obvious to one of ordinary skill in the art to employ such alternatives given their shown equivalence and expected analogous effects on adhesion.

8. **New art** of interest includes **Moser et al.** ((2006/01 65975A1): not prior art) directed to successive plasma polymerization with depositions having functional groups, with the noted that as plasmas are radiation sources, sequential plasma polymerizations may actually read on applicant's broad claimed language.

Other art of interest previously cited in the PCT included: **KOLOSKI et al.** ((6,608,129 B1): abstract; col. 17, lines 6-30, esp.14-17; col. 19, lines 6-16; col. 20, lines 41-65; col. 21, lines 39-54; col. 22, lines 4-19; col. 31, lines 14-42) provides teachings of glow discharge polymerization of organic molecules which retain relevant functional groups, such as oxyfluorides, which may then be infused with radiation curable polymeric material, thus overlapping with above applied Vargo et al., & generically with Daimon et al., but redundant thereto; **LAKSIN et al.** ((6,236,361 B1): abstract; col. 1, lines 5-25; col. 2, lines 55-col. 3, line 21; col. 6, lines 45-67+; col. 7, lines 20-68+, esp. lines 23, 44-45 & 50-61) teach printing via gravure or flexographic techniques of actinic radiation, i.e. electron beam or UV, curable polymerizable inks; **CHEN** ((4,143,949): abstract; col. 2, lines 1-15 & 56-col. 3, line 39; col. 6, lines 3-40) teach forming hydrophilic coating via plasma polymerization of (meth)acrylates or silicones; **AFFINITO** ((6,228,434 B1): abstract; col. 2, lines34-40 & 65-col. 3, line 20; col. 5, esp. lines 35-52) teach plasma polymerization via cross-linking of monomers in a glow discharge; **BADYAL et al.** ((2002/0114954 A1): abstract; [0002]; [0005-8]; [0013]; [0031-33]) teach plasma polarization of fluorocarbons or acrylic acid monomers; **BILYK et al.**((6,800,331 B2): abstract; col. 2, lines 41-57; claims, esp. 31) teach that plasma treatment of plasma polymers are known to be useful to improve bonding of subsequent polymer coating; **WU** ((4,587,156): abstract; col. 3, lines 11-col. 4, line 44) have teachings with respect to application of ink via gravure roll or flexographic printing, with initial use of a

primer; **TSUNASHIMA et al.** ((4,908,277): abstract; col. 2, lines 25-30 & 67-col. 3, lines 15 & 39-68; col. 5, lines 47-66; col. 7, lines 30-47; col. 8, lines 47-53) teaches solution coating an in adhesion layer with functional groups maintained on its surface, then applying UV curable ink via gravure the roll; **HERGENROTHER et al.** ((5,750,206): abstract; col. 3, lines 24-col. 4, line 67; and claims) teaches a plasma deposited hydrocarbon layer having a photoactive hydrophilic polymer deposited thereon that is activated by UV light; **GOTOH et al.** ((5,132,152): abstract; figures 1-2; col. 6) and **KUNZLER et al.** ((2004/0001181 A1): abstract; [0016] & [0019-20]) have teachings of relevant photocured layers, the latter including ink next to plasma polymer layers, but in the opposite order from claimed.

With respect to the **IDS of 12/24/2008**, **Muller-Reich et al.** (WO 2004/035857 A2) is the most relevant, as the English abstract teaches plasma polymerization deposition of a polymer layer retaining C=C &/or C ≡C bonds, i.e. on polymerized functional groups, but the abstract while suggesting this material is used as an adhesive layer, lacks teachings on further coatings applied thereto, radiation cured or not (whether such a teaching is present in the rest of the German document is unknown). **Yasuda et al.** (4,980,196) provides teachings of plasma deposition of polymers that are desired to be reactive with the subsequent primer coating (inclusive of multiple layers of plasma polymerized deposits), but does not disclose whether or not such reactivity is due to unpolymerized functional groups & provides the option of plasma functionalizing the surface via a post-treatment with none polymerizing gas, plus the subsequently applied primer is not taught to include radiation curable coatings, providing examples of thermal cure, etc. The teachings of the cited German reference by **Droschel** are unreadable by the examiner.

9. Applicant's arguments filed 3/19/2010 & discussed above have been fully considered but they are not persuasive.

It is furthered noted with respect to applicant's arguments with respect to **Daimon et al.**, which effectively state taught plasma polymerization processes performed for the express purpose of enhancing

adhesion would have no necessary polymerizable functional groups in the plasma polymer; in support of the examiner's above arguments disagreeing therewith, applicant's attention is directed to **Wu et al.** (5,922,161) as a teaching reference, specifically col. 1, lines 14-30 & col. 2, lines 2-7, which discuss old and well-known concepts with respect to polymer surfaces having bonding difficulties because of low surface energies (i.e. low surface tensions) or chemical inertness, with discussions of practical applications requiring specific levels of wettability & where treatments developed to achieve such requirements include plasma treatment &/or plasma polymerization. Wu et al. state that is known to significantly improve bonding ability of the treated polymer or to activate the desired level of wettability as a result of incorporation is of different types of chemical species into the polymer surface, which may be done as a result of plasma polymerization. Hence, these teachings of the known mechanism by which plasma polymerization increases the wettability, i.e. surface energy, provides evidence of what occurs when Daimon et al.'s taught plasma polymerization is employed as a means to achieve their taught surface wetting tensions, thus showing that such processes are inherently incorporating groups (i.e. species) in the plasma polymer. Therefore, as taught in Daimon et al. enabling the subsequent radiation polymerization to bond to the treated [plasma polymerized] surface, which may be effectively interpreted as encompassing polymerization or cross-linking with the plasma polymer on the surface. It is not necessary to know what specific functional groups are present with respect to Daimon et al.'s process, in order to know that there are necessarily functional groups as claimed, especially considering that the present claims are so very broad as to encompass all possible functional groups that may be deposited by or induced by the plasma polymerization process (i.e. species referred to by Wu et al.), thus the claims are effectively as broad as Daimon et al.'s teachings, only spelling out the known mechanism by which Daimon et al.'s process must operate in order to perform as taught.

Also note, **Timmons et al.** ((5,876,753): cols. 6-12) has extensive discussion of specific plasma polymerization means to increase specific functional group retention for use in subsequent bonding

processes, but applicant's claims as *presently written* do NOT require retention or creation of active functional groups on the order of the teachings of Timmons et al., since as presently written, any amount including an indeterminate, but present amount of functional groups, such as would inherently be present in the plasma polymerized adhesion enhancing deposits of Daimon et al., will read on applicant's broad claim language.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. **Any inquiry** concerning this communication or earlier communications from the examiner should be directed to **Marianne L. Padgett** whose telephone number is **(571) 272-1425**. The examiner can normally be reached on M-F from about 9:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marianne L. Padgett/
Primary Examiner, Art Unit 1792

MLP/dictation software

6/16-17/2010